

precise relation to the rostellum later
seems to vary so much from species to
species that it makes it very difficult
to derive from them any definite generic
character. The whole subject requires
a great deal more accurate observation
of living specimens in early bud in the
ripe bud and in the expanded flower.

I have not examined your *Orechis*
petiolaris, but will do so - my
characters of *Orechis* are derived from
European ones.

I hope you will send expansion
such as you can get from specimens
of so as to be prepared to discuss them
when we meet and if you could procure
ived specimens, not squeezed flat they
would assist me in comprehending your
views.

Ever yours sincerely
George Bentham

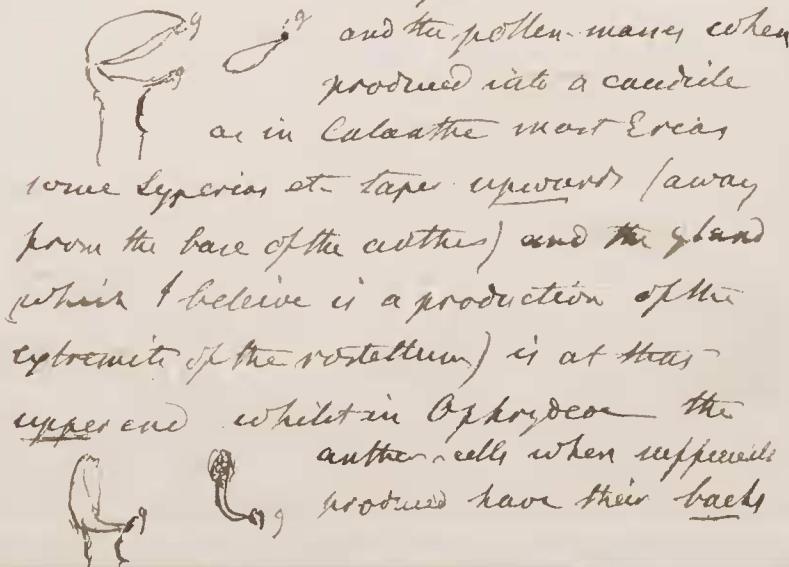
25, WILTON PLACE.
London S.W.

July 13, 1880

My dear Gray

Just received yours of the 1st
and I now write to explain my
meaning about the reversion of the
anther cells in Ophrysaceae

In the great mass of Orchidean the
1st set of the anther cells face the rostellum,



to the rostellum and the caudicles with
the gland at their extremity are at the
lower end of the anther cell.

The true caudicle is I believe always a
portion of the pollen and in those cases
where I have been able to observe it is
(as already shown by various observers)
not connected with the so-called gland till
the opening of the anther cell admits of
the connection - the anther cell however
often opens in the bed long before the
flores expand

In the Ophrysidae the anthers can the
clivadrium and the rostellum are so
closely combined that one cannot tell
where each begins they form one body
as it were to which the two anther cells,
(after very protracted) are closely adnate by
and when these anther cells are much
prolonged on the rostellum the extremities
of the two valves are not always distinguishable

from the lobes of the rostellum and I
have often got quite puzzled between the
slightly turned up margins of the
rostellum lobes and the more rounded
pouches of the "Serapisidae, Orchidaceae, Ophrys"
as observed in the dried specimens - but
on other grounds it goes very much
against the grain in my mind to call
the *Orechideapollinaria* orchis and not a
Habenaria.

The gland or glands of Ophrydeæ generally
form on line the middle lobe of the rostellum
if the ends of the anther cells are short and
contiguous ^{the caudicles} they detach the gland at right
angles - if they are lengthened out on the
lateral lobes beyond the central lobe the
caudicles become attached obliquely or laterally
to the gland - but very often the gland
changes its angle immediately on the liberation
of the pollen mass and the form and length
of the end of the pollen anther cell and its